Remarks/Arguments:

Introduction

Claim 1 has been amended to further describe the "drop-on-demand" printing device of the present invention. Support of this amendment may be found in the Specification at page 11, lines 2-7. Claim 13 has been amended to include the limitations of claim 14. Claim 14 has been amended to further describe the recited ratio. Support for this amendment may be found in the Specification at page 9, lines 7-10.

No new matter is introduced with these amendments. Entry of the amendments is respectfully requested.

Section 102 Rejections

Claims 1, 8 and 10-15 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. 6,267,474 to Mochizuki (hereinafter "Mochizuki"). Applicant respectfully traverses.

Mochizuki fails to disclose a printing device for printing a substrate with a printing medium using the "drop-on-demand" principle. In particular, Mochizuki fails to disclose a spray nozzle with an interacting piezo-electric element for generating and releasing a drop of the printing medium on demand, which is required for the piezo drop-on-demand principle. In fact, Mochizuki is silent about the type of inkjet recording device. It discloses only an inkjet recording device having an inkjet recording head.

As explained in the introductory part of the present specification, inkjet recording devices can also make use of the "thermal drop-on-demand" principle where heating elements are used instead of a piezo-electric element to form drops. As Mochizuki is silent as its type of inkjet recording device, the Examiner must then properly apply an inherency argument to the

missing descriptive matter of Mochizuki. To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. *Crown Oper. Int'l Inc. v. Solutia Inc.*, 289 F.3d 1367, 62 U.S.P.Q.2d 1917 (Fed. Cir. 2002). Further, inherency may not be established by probabilities or possibilities, and the mere fact that a certain thing may result from a given set of circumstances is not sufficient for a *prima facie* case of anticipation. *Scaltech Inc. v. Retec/Tetra L.L.C.*, 153 F.3d 1193, 51 U.S.P.Q.2d 1055 (Fed. Cir. 1999). Occasional results are not inherent. *Mehl/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1365, 52 U.S.P.Q.2d 1303, 1306 (Fed. Cir. 1999). Therefore, the examiner may not properly infer the missing descriptive matter from Mochizuki in an attempt to present a Section 102 rejection.

Thus, Mochizuki clearly fails to disclose the invention as presently defined by independent claim 1.

Moreover, another fundamental difference between the inkjet recording device according to Mochizuki and the printing device as claimed in claim 1 is that in the present invention the working container and the reservoir form communicating vessels during normal operations, due to the open connection between them. (See, e.g., Specification at page 4, lines 1-31). In the device of Mochizuki there is no open connection during normal operation, but only during controlled filling from the ink bag 40 to the ink bag 50, otherwise the electromagnetic valve 28 is closed. This is evident from the description in Mochizuki. (See. e.g., Mochizuki, column 4, lines 27-44, and column 5, lines 19-62).

With respect to the reservoir claims 13 and 14, indeed Mochizuki discloses an ink bag 40. Mochizuki, however, fails to disclose that the ratio of the length of the front surface of the reservoir to its width is greater than 2.5. Moreover, Mochizuki fails to disclose the ratio as set forth in claim 14.

The examiner may not properly rely on the figures of Mochizuki in an attempt to read on the claimed ratios of claims 13 and 14. Mochizuki fails to disclose that its drawings are to scale and is silent as to dimensions presented therein. Accordingly, arguments by the examiner based on measurement of the drawing features are of little value. (See, *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 55 USPQ2d 1487, 1491 (Fed. Cir. 2000); MPEP §2125). Therefore, Mochizuki fails to disclose the invention as presently defined by claims 13 and 14.

Thus, Mochizuki fails to disclose the present invention as claimed. Accordingly, reconsideration and withdrawal of the rejections of claims 1, 8 and 10-15 under 35 U.S.C. §102(b) are respectfully requested.

Section 103 Rejections

Claims 2 and 9 are rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Mochizuki in view of U.S. Patent No. 3,708,798 to Hildenbrand et al. (hereinafter "Hildenbrand"). Applicant respectfully traverses.

Hildenbrand fails to cure the deficiencies of Mochizuki. As explained in Mochizuki, column 1, lines 20-24, as well as in several other paragraphs relating to the composition of the ink bag material (see for example column 3, line 16 ff) it is important that the ink of Mochizuki is degassed, otherwise air contained in the ink would deteriorate the performance of jetting an ink droplet. Now, the manifold 12 in Hildenbrand contains an air bubble trap 26 at the top; see figure 1 and column 3, line 33 ff, abstract and the like. The air bubble trap 26 operates to regulate pressure fluctuations within the manifold. According to Hildenbrand at column 3, line 53, another function of the air trap 26 is to accumulate and trap bubbles of air and to prevent air bubbles in the ink from passing through the system into the printing head 14. Thus, the one of ordinary skill in the art would not apply a manifold including an air bubble trap as specifically taught by Hildenbrand in an ink jet recording device of Mochizuki because the strict measures

relating to the degassed ink would be counteracted by the presence of the air bubble trap in the manifold according to Hildenbrand.

Indeed, the manifold including an air bubble trap as required by Hildenbrand is a direct teaching away from the purpose, intent and function of Mochizuki. Accordingly, one of ordinary skill in the art would not be motivated to combine Mochizuki and Hildenbrand in an attempt to arrive at the present invention.

Thus, Mochizuki and Hildenbrand, individually or in combination, fail to teach or suggest the invention as presently defined by claims 2 and 9. Reconsideration and withdrawal of the rejections of claims 2 and 9 under 35 U.S.C. § 103(a) are respectfully requested.

Claims 3-7 are rejected under 35.U.S.C. § 103(a) as allegedly being obvious over Mochizuki in view of U.S. Patent No. 4,441,422 to Dreeben (hereinafter "Dreeben") and U.S. Patent Application Publication No. 2003/0071722 to Cole (hereinafter "Cole"). Applicant respectfully traverses.

According to claim 3, the printing device of the present invention is provided with displacement means for moving the reservoir upwards with respect to the working container. Now, applying the reasoning of the Examiner, the reservoir of Dreeben is formed by body or pad 46. Then the working container is the printing body or part 47. There is, however, a fixed relation between the part 47 and body 46. The displacement means shown in Dreeben allows the vertical shifting movement of the entire printing apparatus 10 in proper synchronism with stepped or intermittent movement of the web 13 to be printed by the pad 47. There is, however, clearly no movement of pad 46 with respect to part 47.

Cole relates to a dump truck tale gate latch monitor. Although it shows a tilting mechanism, this topic is far removed from the technical field of piezo drop-on-demand printing that one of ordinary skill in the art would not be motivated to combine the teachings of Cole as asserted by the examiner. In establishing a *prima facie* case of obviousness, the cited

references must be considered for the entirety of their teachings. *Bausch & Lomb, Inc. v. Barnes-Hind, Inc.*, 230 U.S.P.Q. 416, 419 (Fed. Cir. 1986). It is impermissible during examination to pick and choose from a reference only so much that supports the alleged rejection. *Id.* It is only through hindsight reconstruction and very selective picking and choosing while ignoring divergent teachings does the Examiner attempt to reach the present invention through the combination of Mochizuki, Dreeben and Cole. It is also well established, however, that hindsight reconstruction of a reference does not present a *prima facie* case of obviousness, and any attempt at hindsight reconstruction using Appellant's disclosure is strictly prohibited. *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1445-46 (Fed. Cir. 1993). Such hindsight reconstruction by the Examiner is clear as, *inter alia*, is related to a dump truck tale gate latch monitor.

Furthermore, the examiner has asserted an overly broad interpretation of claims 3-7 in an attempt to provide analysis for the *Graham* factors under a Section 103 obviousness rejection. Dependent claims 3-7 cannot be read in absence of the independent claim. Independent claim 1 clearly describes that the releasable flexible reservoir is for storing degassed printing medium. The flexible reservoir is in communication with a flexible working container with is arranged in a fixed position relative to the spray nozzle. The mere movement of fluid by gravity, as asserted by the examiner, is not the proper inquiry. Rather, the examiner must consider the movement of fluid from one reservoir or container to another container.

In such a consideration, one of ordinary skill in the art would not be motivated to by the dump truck teachings of Cole in an attempt to arrive at the present invention because, *inter alia*, Cole is not directed in the movement of fluid from one container to another container. Assuming *arguendo* that the examiner may properly consider the open bed 5 of Cole's dump truck as a "container", Cole fails to teach or suggest the transport of material from the bed 5 into another container. The examiner, however, asserts that the open space outside of Cole's bed 5 is another "working container". This cannot be a proper assertion because, *inter alia*, the

open space is the final disposition of the product of Cole. In the terms of the present claims, the "open space" of Cole would be the substrate onto which drops of printing medium are deposited via the spray nozzle, as set forth in independent claim 1. In other words, Cole fails to teach or suggest a "second" container.

Furthermore, Cole fails to cure the deficiencies of Dreeben. The reservoir 46 of Dreeben moves in conjunction with its printing pad 47, which printing pad 47 is considered by the examiner to be a "working container". In other words, Dreeben fails to teach or suggest a displacement means for moving a reservoir upwards with respect to the working container because the elements 46 and 47 of Dreeben move in unison. Indeed, Dreeben specifically teaches its printing pad 47 rests on and must be in contact with its reservoir body 46. (Dreeben, column 3, lines 11-18). Now modifying Dreeben, as suggested by the examiner, to have relative movement of the printing pad 47 with respect to the reservoir 46 would destroy the very purpose, function and intent of Dreeben because ink could not be delivered from the reservoir 46 to the printing pad 47 when they are vertically or upwardly separated.

Clearly, the examiner fails to combine the elements of Dreeben and Cole according to their established functions and fails to consider the limitations of claim 1 when attempting to rationalize the *Graham* factors under a Section 103 obviousness rejection. Accordingly, the claimed elements of the present invention are clearly more than predictable use of prior art elements, and the claims of the present invention are therefore patentably distinct. *KSR Int'l Co. v. Telefex Inc.*, 127 S.Ct. 1727, 1740 (2007).

Thus, Mochizuki, Dreeben and Cole, individually or in combination, fail to teach or suggest the invention as presently defined by claims 3-7. Reconsideration and withdrawal of the rejections of claims 3-7 under 35 U.S.C. § 103(a) are respectfully requested.

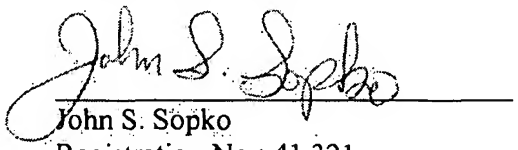
Summary

Therefore, Applicants respectfully submit that independent claim 1, and all claims dependent therefrom, are patentably distinct. This application is believed to be in condition for allowance. Favorable action thereon is therefore respectfully solicited.

Should the Examiner have any questions or comments concerning the above, the Examiner is respectfully invited to contact the undersigned attorney at the telephone number given below.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 08-2461. Such authorization includes authorization to charge fees for extensions of time, if any, under 37 C.F.R § 1.17 and also should be treated as a constructive petition for an extension of time in this reply or any future reply pursuant to 37 C.F.R. § 1.136.

Respectfully submitted,



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